

September 28, 1959

Dr. Michiham Kohayashi
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Japan

Dear Dr. Kohayashi:

Your letter of August 11th has been forwarded here from Wisconsin.

I know my former colleagues at the University of Wisconsin, Professor Perry Wilson and Professor Robert Burris would be most interested to discuss your observations.

The U tube filter described in our 1952 paper on transduction was constructed from the UF sintered glass filter disk sold by the Corning-Pyrex Company, Corning, New York. I believe that the disk was obtained in the UF porosity in a form similar to their catalogue number 39570. However, their present catalogue does not list a disk in UF porosity although they sell bacterial filters and funnels which contain such a disk, for example catalogue number 36060. If you were intent on producing this apparatus I am sure that it could be fabricated from a Büchner type funnel under this catalogue number. Alternatively you might write to the Corning Company and ask if they will furnish the disk in a more convenient form.

If I were to construct just such an apparatus now, however, I think I would alter the design slightly and use one of the Corning number 35000 filter candles, sealing one of these candles inside an outer glass jacket and inoculating one species in broth inside the candle another species outside. By alternating suction and pressure to the candle one should get an oscillating flow of liquid.

However, during the past few years the Millipore Corporation whose address is P.O. Box 297, Bedford, Massachusetts, has produced the remarkable membrane filters which would be much more efficient for this type of apparatus. The difficulty with the sintered glass filter is that it clogs so easily that it is virtually impossible to work with any moderate density of bacteria in the cultures.

Yours sincerely,

Joshua Lederberg
Professor of Genetics

KOHAYASHI, M.